

REMARKS

Applicants have canceled claims 3, 12, 13, 19, and 20 without prejudice or disclaimer of their subject matter. Upon entry of this Amendment, claims 1, 2, 4 - 11, 14 - 18, and 21 - 25 remain pending, with claims 1, 2, 4 - 11, and 14 - 18 withdrawn from consideration as drawn to a nonelected invention, and claims 21 - 25 are under current examination.

Regarding the Final Office Action:

In the Final Office Action, the Examiner rejected claims 3, 12, 19, 21, 22, and 24 under 35 U.S.C. § 102(b) as anticipated by Gurtler, et al. (U.S. Patent No. 5,424,245) (“Gurtler”); rejected claims 3 and 13 under 35 U.S.C. § 102(b) as anticipated by Maley (U.S. Patent No. 6,278,181) (“Maley”); rejected claims 20 and 25 under 35 U.S.C. § 103(a) as unpatentable over Gurtler in view of Wenzel, et al. (U.S. Patent No. 6,150,724) (“Wenzel”); and rejected claim 23 under 35 U.S.C. § 103(a) as unpatentable over Gurtler in view of Maley. Applicants traverse the rejections, as detailed above, for the following reasons.¹

Regarding the Rejection of Claims 3, 12, 19, 21, 22, and 24 under 35 U.S.C. § 102(b):

The Examiner rejected claims 3, 12, 19, 21, 22, and 24 under 35 U.S.C. § 102(b) as anticipated by Gurtler. Claims 3, 12, and 19 have been canceled, without prejudice or disclaimer of their subject matter, thereby rendering the rejection of these claims moot. Regarding claim 21, Applicants respectfully traverse this rejection. Gurtler does not anticipate Applicants’ claimed invention.

In order to establish anticipation under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency,

¹ The Office Action contains statements characterizing the related art and the claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

in that single reference. Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the … claim.” See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

On pages 3 - 4 of the Final Office Action, the Examiner alleged that: “[r]egarding claim 21, Fig. 1 of Gurtler shows a semiconductor device comprising; … some of the first connecting terminals of the second connecting terminals are distributed and arranged in the surface of the semiconductor chip, and power supply or a ground potential is to be applied to said some of the first and second connecting terminals (col. 3, lines 37-41).”

Applicants dispute the Examiner’s characterization of claim 21, as the Examiner’s allegations do not address the last element of claim 21, which recites: “… some of the first connecting terminals or the second connecting terminals are distributed and arranged substantially on an entire surface of the semiconductor chip, and a power source supply potential or ground potential is to be applied to said some of the first and second connecting terminals.” Gurtler does not disclose at least this element of claim 21. The Examiner has inaccurately quoted claim 21, and omitted “substantially on an entire surface of the semiconductor chip” from his analysis.

Gurtler therefore does not disclose each and every element of Applicants’ claimed invention, despite the Examiner’s allegations. In contrast to the claimed invention, Gurtler is directed to a semiconductor device where “Multi-chip module substrate 49 is shown to include a recessed area for housing single-sided chip 39 and thereby minimize lead lengths for mating interconnects 48-50 which allow power and I/O signals to transfer between the chip system and the higher level multi-chip module system”. See Gurtler col. 3, lines 37 - 42 In Gurtler, interconnects 48 and 50 are arranged only on the peripheral portion of the semiconductor chip,

and not arranged substantially on an entire surface of the semiconductor chip, as recited in claim 21. Thus, Gurtler does not disclose at least the last element of claim 21, and therefore, does not anticipate the claimed invention.

Independent claim 21 is allowable, for the reasons set forth above, and dependent claims 22 and 24 are also allowable at least by virtue of their dependence from allowable base claim 21. Therefore, the 35 U.S.C. § 102(b) rejection should be withdrawn.

Regarding the Rejection of Claims 3 and 13 under 35 U.S.C. § 102(b):

The cancellation of claims 3 and 13, without prejudice or disclaimer of their subject matter, has rendered this rejection moot.

Regarding the Rejection of Claims 20 and 25 under 35 U.S.C. § 103(a):

The Examiner rejected claims 20 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Gurtler in view of Wenzel. Claim 20 has been canceled, without prejudice or disclaimer of its subject matter, thereby rendering the rejection of this claim moot. Regarding claim 25, Applicants disagree with the Examiner's arguments and conclusions. A *prima facie* case of obviousness has not been established.

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).” M.P.E.P. § 2142, 8th Ed., Rev. 2 (May 2004), p. 2100-128.

At least the first requirement for establishing a *prima facie* case of obviousness has not been established, because Gurtler, taken alone or in combination with Wenzel, does not teach or suggest each and every element of Applicants' claimed invention. In the previous section of this paper, Applicants established that Gurtler does not teach or suggest Applicants' claimed "... some of the first connecting terminals or the second connecting terminals are distributed and arranged substantially on an entire surface of the semiconductor chip, and a power source supply potential or ground potential is to be applied to said some of the first and second connecting terminals," which appears in both independent claims 21 and 25.

The Examiner then relied on Wenzel for its teaching of "a multi-chip packaging device wherein the second semiconductor chip (102) is larger than the first semiconductor chip (104)" (Final Office Action, p. 7) to allegedly cure additional deficiencies in Gurtler. Wenzel, however, still does not teach or suggest at least the above-quoted elements of independent claim 25. Therefore, even if Wenzel teaches a multi-chip packaging device, as the Examiner cited, its combination with Gurtler still does not teach or suggest each and every element of the claimed invention.

Therefore, the Examiner's application of Gurtler and Wenzel does not satisfy the tenets of a proper 35 U.S.C. § 103(a) rejection. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, [...]. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, [...]" M.P.E.P. § 2143.03, internal citations omitted. The Examiner has not met an essential criterion for establishing a *prima facie* case of obviousness, wherein "the prior art reference (or references when combined) must teach or suggest all the claim

limitations.” See M.P.E.P. §§ 2142 and 2143. Claim 25 is therefore allowable for the reasons presented above, and the improper 35 U.S.C. § 103(a) rejection should be withdrawn.

Regarding the Rejection of Claim 23 under 35 U.S.C. § 103(a):

The Examiner rejected claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Gurtler in view of Maley. Applicants disagree with the Examiner’s arguments and conclusions. A *prima facie* case of obviousness has not been established.

Applicants have already established that Gurtler does not teach or suggest at least the elements of independent claim 21, from which claim 23 depends. Furthermore, the Examiner cited Maley to teach “the n-th stacked (220n) multi-chip device” (Final Office Action, p. 9), after admitting that Gurtler does not teach or suggest “n-th stacked chips” (*Id.*). The addition of Maley, however, fails to cure the deficiencies of Gurtler as it pertains to independent claim 21. That is, Gurtler, taken alone or in combination with Maley, still does not teach or suggest at least Applicants’ claimed “... some of the first connecting terminals or the second connecting terminals are distributed and arranged substantially on an entire surface of the semiconductor chip, and a power source supply potential or ground potential is to be applied to said some of the first and second connecting terminals” (independent claim 21).

Therefore, the Examiner’s application of Gurtler and Wenzel does not satisfy the tenets of a proper 35 U.S.C. § 103(a) rejection. Dependent claim 23 is also allowable at least by virtue of its dependence from allowable base claim 21. The improper 35 U.S.C. § 103(a) rejection should be withdrawn.

Conclusion:

In view of the foregoing, Applicants request reconsideration of the application and withdrawal of the rejections. Pending claims 21 - 25 are in condition for allowance, and Applicants request a favorable action.

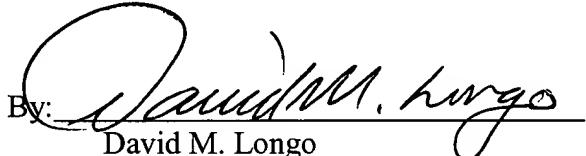
Should the Examiner continue to dispute the patentability of the claims after consideration of this Amendment after Final, Applicants encourage the Examiner to contact the undersigned representative by telephone to discuss any remaining issues or to resolve any misunderstandings.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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